Areas benefiting from a modernized National Height System	Estimated Value to Constituents	Explanation of Benefits
Nationwide Terrain	**$33.5 million**	• Replace less-accurate Level 1 DEMs that cost USGS approximately $33.5 Million • Enable rapid generation of contours for USGS maps and GISs nationwide • Enable 3-D modeling by USACE, FHA, FRA, FAA, EPA, USFS, etc.
Nationwide Watersheds	**$100 million**	• Automated hydrologic modeling by NWS and FEMA to predict locations/ volumes of peak water concentrations
Special Flood Hazard Areas (SFHAs)	**$225+ million**	• Automated hydraulic modeling by FEMA to determine depth and extent of flood waters • Determination of flood risks and insurance rates
Coastal Erosion Zones	**$11.25+ million**	• Accurate determination of coastal erosion rates • Determination of insurance rates
Urban Areas	**$500 million**	• Urban planning • Intelligent Transportation System (ITS) planning • Elevation layer in GIS database • Stormwater management
Farm Lands	**$1.7 billion**	• Precision farming for planned application of water, fertilizer, etc. • Control of unwanted run-off and stream contamination
Maritime Navigation and Safety	**$9.6 billion**	• Positioning of dredges • Positioning of cargo ships
Surveying Industry	**Not estimated**	• Vastly improved survey procedures
Totals	**$12+ billion**	•

Table of estimated benefits from a modernized National Height System summarized from several of the Study tables

THE VALUE OF HEIGHT MODERNIZATION

THE BIGGIES:

-MACHINE CONTROL

-AGRICULTURE

-NAVIGATION

-GIS/GEOSPATIAL POSITIONING